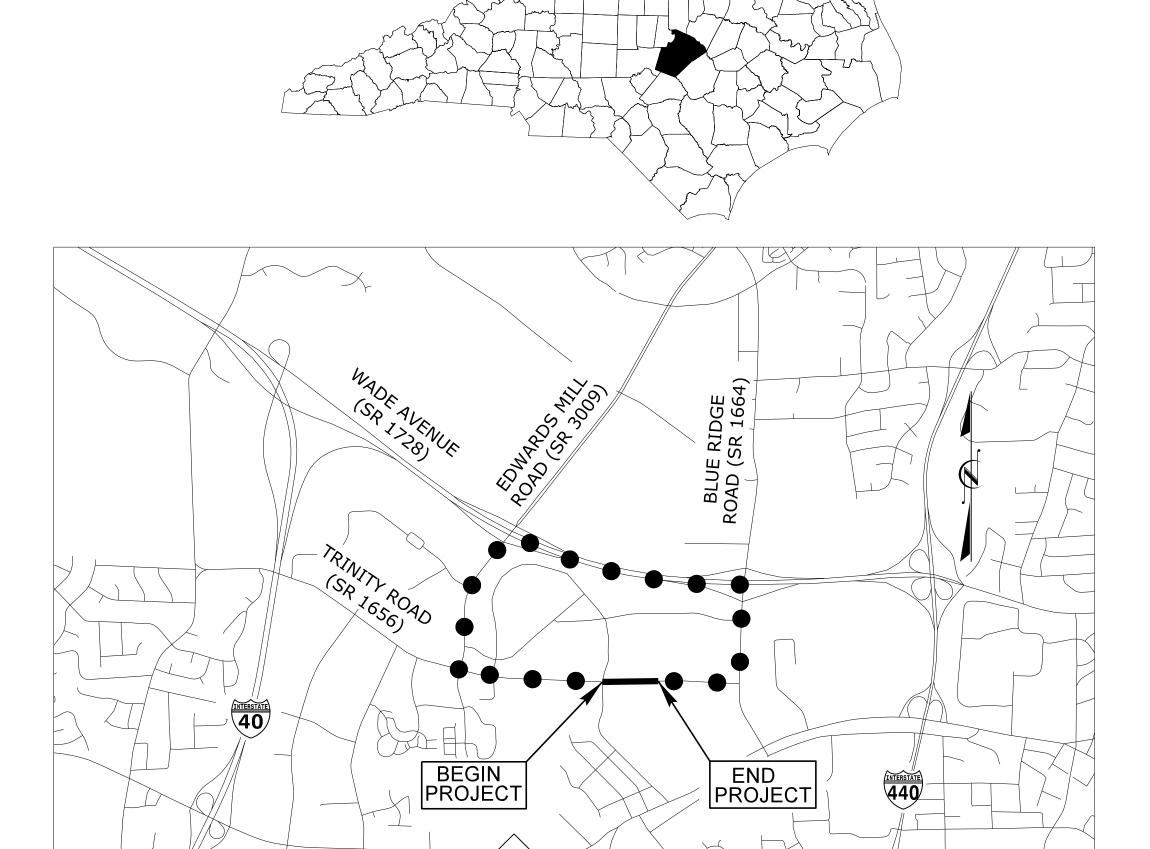
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TRANSPORTATION MANAGEMENT PLAN

WAKE COUNTY



VICINITY MAP

RALEIGH

NOT TO SCALE

INDEX OF SHEETS

SHEET NO. TITLE TMP - 1 TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND TMP-1A TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES, AND LOCAL NOTES) TMP-1B SPECIAL SIGN DESIGNS TMP-2 TMP-3 TEMPORARY TRAFFIC CONTROL PHASING TRAFFIC CONTROL OVERVIEW PHASE I TEMPORARY TRAFFIC CONTROL PHASE I DETAILS TMP-5-6 TMP - 7 TRAFFIC CONTROL OVERVIEW PHASE II TMP-8-9 TEMPORARY TRAFFIC CONTROL PHASE II DETAILS TMP - 10 TEMPORARY TRAFFIC CONTROL DETOUR DETAILS

> 10/24/17 DATE SUBMITTED SUBMITTAL: STAGING CONCEPT MIDPOINT PRE-FINAL |X FINAL

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APPROVED: Kevin Van Metre **DATE**: 10/25/2017 SEAL

WORK ZONE SAFETY & MOBILITY

"from the MOUNTAINS to the COAST"

N.C.D.O.T. WORK ZONE TRAFFIC CONTROL 1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561 750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
PHONE: (919) 773-2800 FAX: (919) 771-2745

JOSEPH HUMMER, P.E. STATE TRAFFIC MANAGEMENT ENGINEER SAMUEL COLEMAN, P.E. STATE PROJECT DESIGN ENGINEER, CENTRAL REGION DON RICHARDSON STATE DESIGN ENGINEER, CENTRAL REGION

KEVIN VAN METRE, P.E. TRAFFIC CONTROL PROJECT ENGINEER DAN SCHEEL, EI TRAFFIC CONTROL PROJECT DESIGN ENGINEER

DOCUMENT NOT CONSIDERED FINAL **UNLESS ALL SIGNATURES COMPLETED** TMP-1

PROJ. REFERENCE NO. W-5522 TMP-1A

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" -PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD.	NO.	TITLE

1101.01 1101.02 1101.03	WORK ZONE ADVANCE WARNING SIGNS TEMPORARY LANE CLOSURES TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1170.01	POSITIVE PROTECTION
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS

LEGEND

GENERAL

DIRECTION OF TRAFFIC FLOW ----- EXIST. PVMT. NORTH ARROW — PROPOSED PVMT.



REMOVAL

WORK AREA

PAVEMENT MARKINGS

----EXISTING LINES ——TEMPORARY LINES

TEMPORARY PAVEMENT MARKINGS

PA 4" WHITE EDGELINE PI 4" DOUBLE YELLOW CENTERLINE

TRAFFIC CONTROL DEVICES

PORTABLE CONCRETE BARRIER (PCB) BARRICADE (TYPE III)

DRUM SKINNY DRUM TUBULAR MARKER

TEMPORARY CRASH CUSHION FLASHING ARROW BOARD

FLAGGER

LAW ENFORCEMENT

TRUCK MOUNTED ATTENUATOR (TMA)

CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

O PORTABLE SIGN

─ STATIONARY SIGN

STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

CRYSTAL/CRYSTAL

CRYSTAL/RED

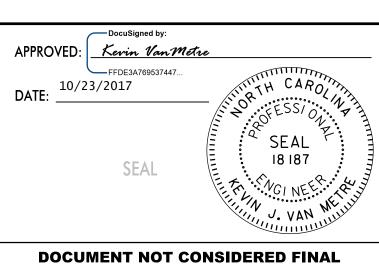
YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS

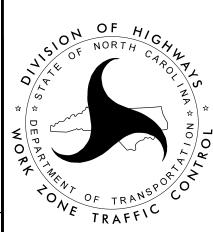
PAVEMENT MARKING SYMBOLS

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UNLESS ALL SIGNATURES COMPLETED



ROADWAY STANDARD DRAWINGS & LEGEND

PROJ. REFERENCE NO.	SHEET NO.
W-5522	TMP-1B

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME

ROAD NAME

DAY AND TIME RESTRICTIONS

YOUTH CENTER DRIVE

MONDAY-FRIDAY 6:00AM TO 9:00 AM MONDAY-FRIDAY 4:00PM TO 7:00 PM

B) DO NOT STOP TRAFFIC AS FOLLOWS:

DAY AND TIME

BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

DURATION AND

RESTRICTIONS

OPERATION

YOUTH CENTER DRIVE MONDAY-FRIDAY

6AM-9AM, 4PM-7PM

15 MINUTES FOR DRAINAGE INSTALLATION

C) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY

LANE AND SHOULDER CLOSURE REQUIREMENTS

- D) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.
- E) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

TRAFFIC PATTERN ALTERATIONS

G) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

H) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS. I) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.

COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.

- ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- K) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 50 IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC BARRIER

L) PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.

PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION UNLESS THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER IS OFFSET FROM ONCOMING TRAFFIC AS FOLLOWS OR AS SHOWN IN THE PLANS: (SEE ALSO 1101.05)

OSTED SPEED LIMIT	MINIMUM OFFSET
40 OR LESS	15 FT
45 - 50	20 FT
55	25 FT
60 MPH or HIGHER	30 FT

TRAFFIC CONTROL DEVICES

- M) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.
- N) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- O) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES SKINNY DRUMS PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

P) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME MARKING

YOUTH CENTER DRIVE TRINITY ROAD

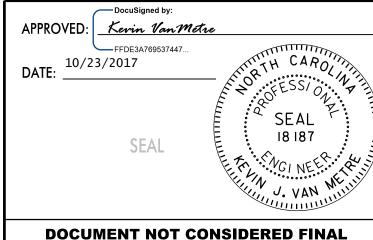
PAINT PAINT RAISED RAISED

MARKER

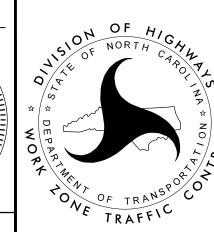
- Q) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- R) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.
- S) ALL CURB RAMP LOCATIONS SHALL BE DERIVED FROM STATIONING SHOWN ON PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER IN COORDINATION WITH THE SIGNING AND DELINEATION UNIT.

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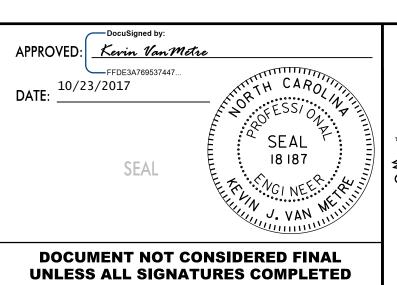
TRANSPORTATION **OPERATIONS** PLAN

PROJ. REFERENCE NO. SHEET NO. TMP - 2

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SPECIAL SIGN DESIGNS

PROJ. REFERENCE NO.	SHEET NO.
W-5522	TMP-3

PHASING

NOTE: "RSD" REFERS TO ROADWAY STANDARD DRAWINGS.

PHASE I

- STEP 1- USING RSD 1101.01 (SHEET 3 OF 3), INSTALL ADVANCE WARNING SIGNS ON TRINITY ROAD AND YOUTH CENTER DRIVE.
- STEP 2- USING RSD 1101.02 (SHEET 1 OF 14) INSTALL PORTABLE CONCRETE BARRIER (PCB) ALONG THE WESTERN SIDE OF
 YOUTH CENTER DRIVE. INSTALL TEMPORARY PAVEMENT MARKINGS AS SHOWN ON SHEET TMP-5 AND TMP-6. REMOVE ANY CONFLICTING MARKINGS.
- STEP 3- INSTALL DRAINAGE ALONG THE WESTERN SIDE OF -Y2-.
- STEP 4- USING RSD 1101.02 (SHEET 1 OF 14) INSTALL DRAINAGE ACROSS YOUTH CENTER DRIVE.
 STEEL PLATE ANY WORK NOT COMPLETED IN A SINGLE DAY.

PHASE II

STEP 1- USING RSD 1101.02 (SHEET 1 OF 14) RESET PCB ALONG EASTERN SIDE OF YOUTH CENTER DRIVE. REMOVE ANY CONFLICTING MARKINGS. INSTALL TEMPORARY PAVEMENT MARKINGS AS SHOWN ON SHEET TMP-8 AND TMP-9.

INTERMEDIATE CONTRACT TIME

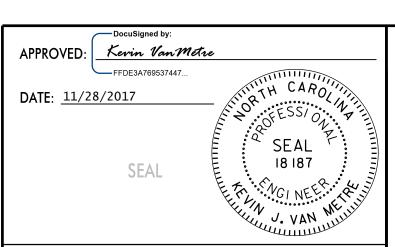
CONTRACTOR SHALL COMPLETE THE CONSTRUCTION DESCRIBED IN PHASE II, STEPS 2 THRU 4, BETWEEN 7:00 PM ON MARCH 1, 2018 AND 6:00 AM ON AUGUST 1, 2018. (SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES IN THE CONTRACT DOCUMENTS.)

- STEP 2- INSTALL DETOUR SIGNING AS SHOWN ON SHEET TMP-10. USING RSD 1101.03 (SHEET 1 OF 9) PLACE BARRICADES AND CLOSE TRINITY ROAD.
- STEP 3- INSTALL PEDESTRIAN TUNNEL AND PAVE UP TO BUT NOT INCLUDING THE FINAL SURFACE COURSE OF -L-. USING RSD 1101.02 (SHEET 1 OF 14) REMOVE PCB ALONG -Y2- WHEN DRAINAGE INSTALLATION IS COMPLETE. REMOVE ANY CONFLICTING MARKING FROM 11+28 TO 16+70.
- STEP 4- UPON COMPLETION OF TRINITY TUNNEL AND PAVING OPERATIONS, OPEN TRINITY RD. TO VEHICULAR TRAFFIC.

PHASE III

- STEP 1- USING RSD 1101.02 (SHEET 1 OF 14) MILL EXISTING SURFACE COURSE FROM -L- 10+00 TO 13+70 AND FROM -L- 16+15 TO 16+92 AS SHOWN IN ROADWAY PLANS.
- STEP 2- USING RSD 1101.02 (SHEET 1 OF 14) INSTALL FINAL SURFACE COURSE AND FINAL PAVEMENT MARKINGS FROM -L- 10+00 TO 13+70 AND FROM -L- 16+15 TO 16+92. SEE PAVEMENT MARKING PLANS.
- STEP 3- REMOVE ANY REMAINING TEMPORARY TRAFFIC CONTROL ITEMS.





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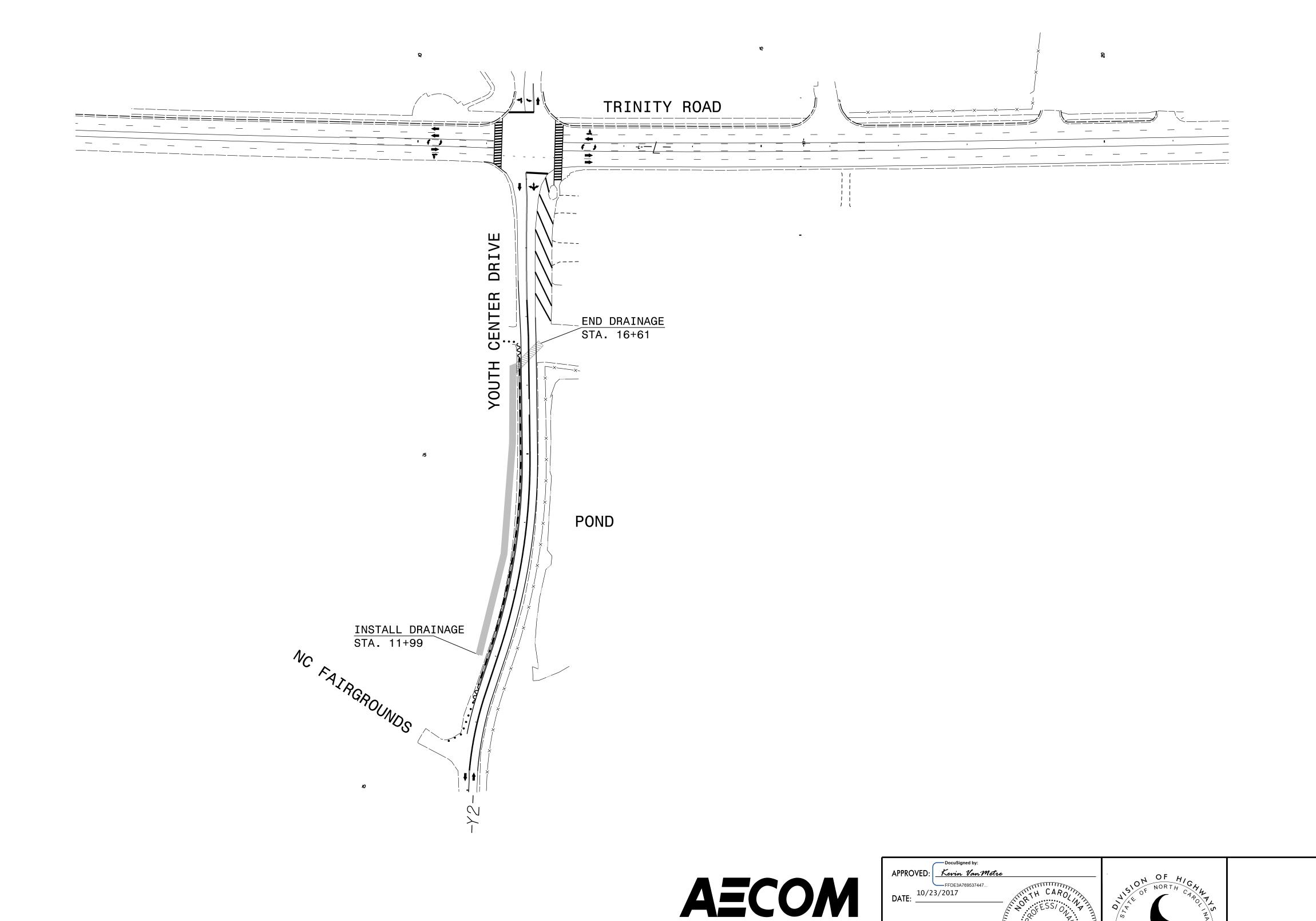


PHASING

PROJ. REFERENCE NO. SHEET NO. TMP - 4

PHASE I

OVERVIEW



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10/23/2017 R:\Traffic\TrafficContra vanmetrek

PROJ. REFERENCE NO. SHEET NO. W-5522 TMP-5

TRINITY ROAD EXISTING MARKINGS $(\widehat{\mathbf{X}})$ END SHIFT -Y2- 17+52 (X) EXISTING MARKINGS BEGIN SHIFT -Y2- 16+69 -Y2- 16+61 • • • -Y2- 16+39 END PCB

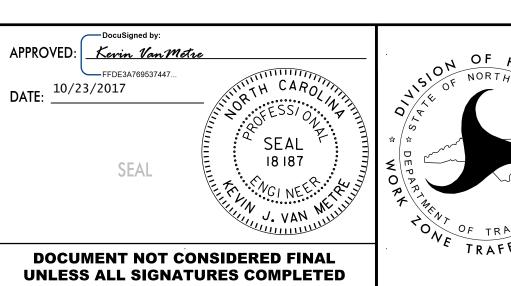
MATCHLINE -Y2- STA. 15+50.00 SEE SHEET TMP-6

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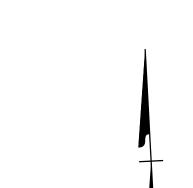
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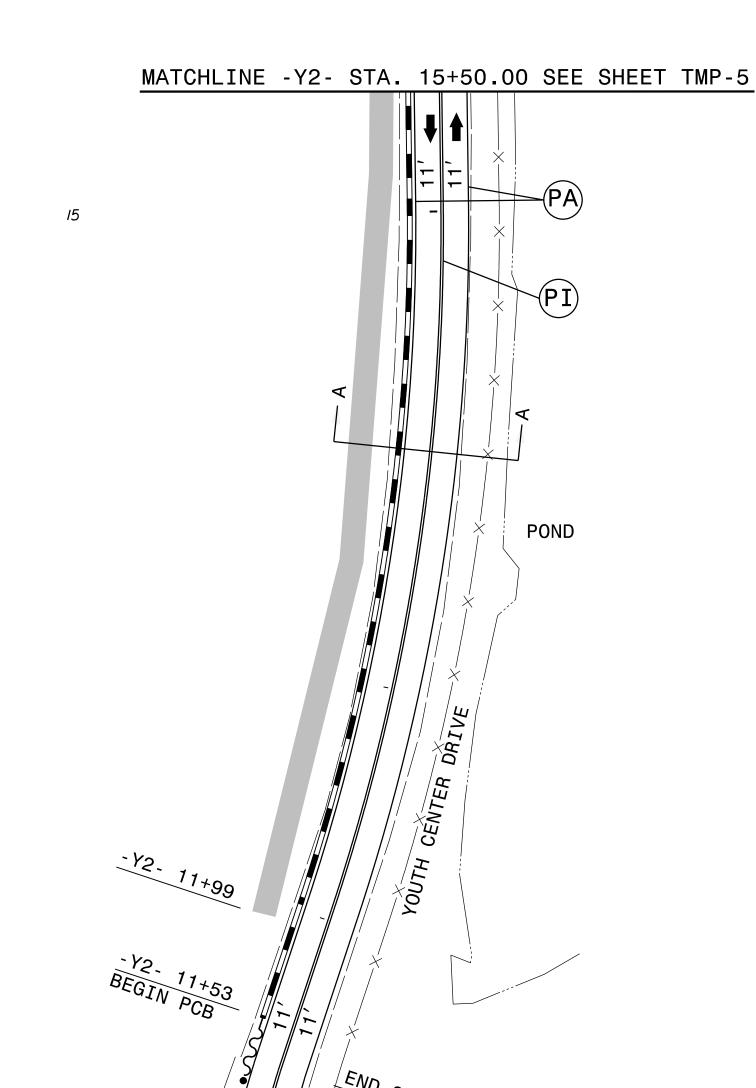
1 " = 40'



PHASE I DETAIL 1

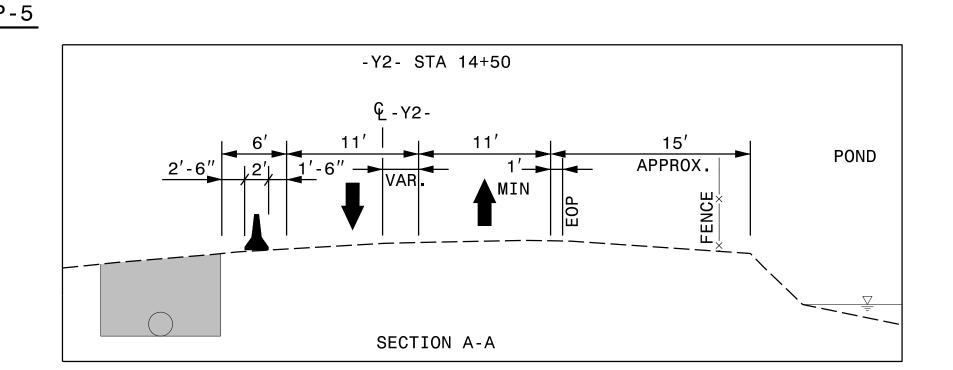
PROJ. REFERENCE NO.	SHEET NO.				
W-5522	TMP-6				





BEGIN SHIFT -Y2- 11+28

EXISTING MARKINGS

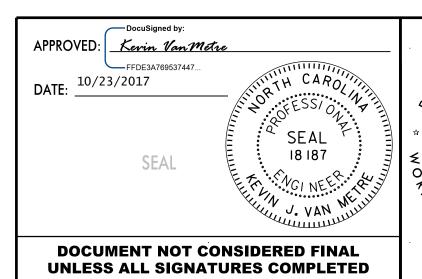


NC FAIRGROUNDS



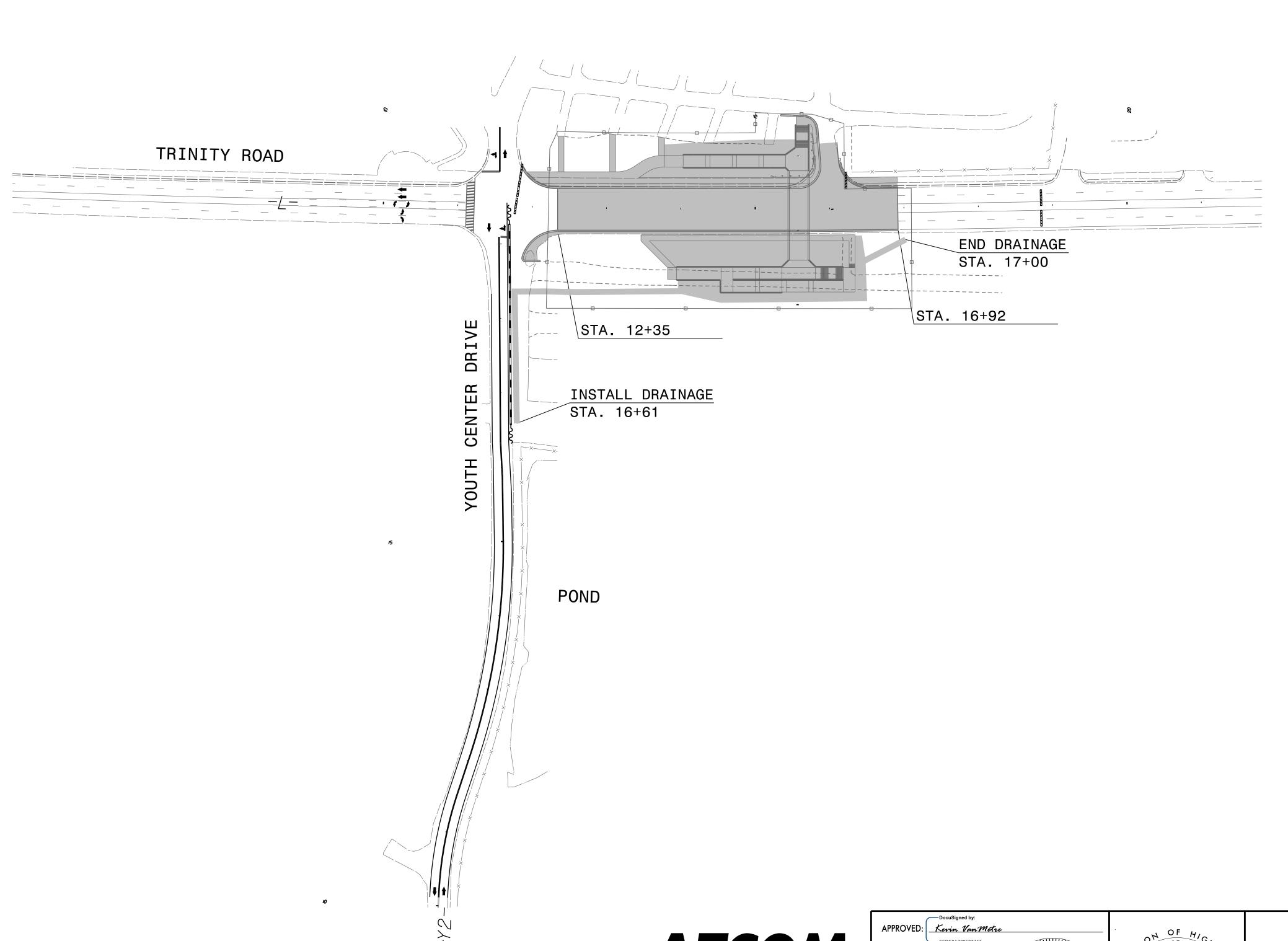
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1 " = 40'



PHASE I DETAIL 2

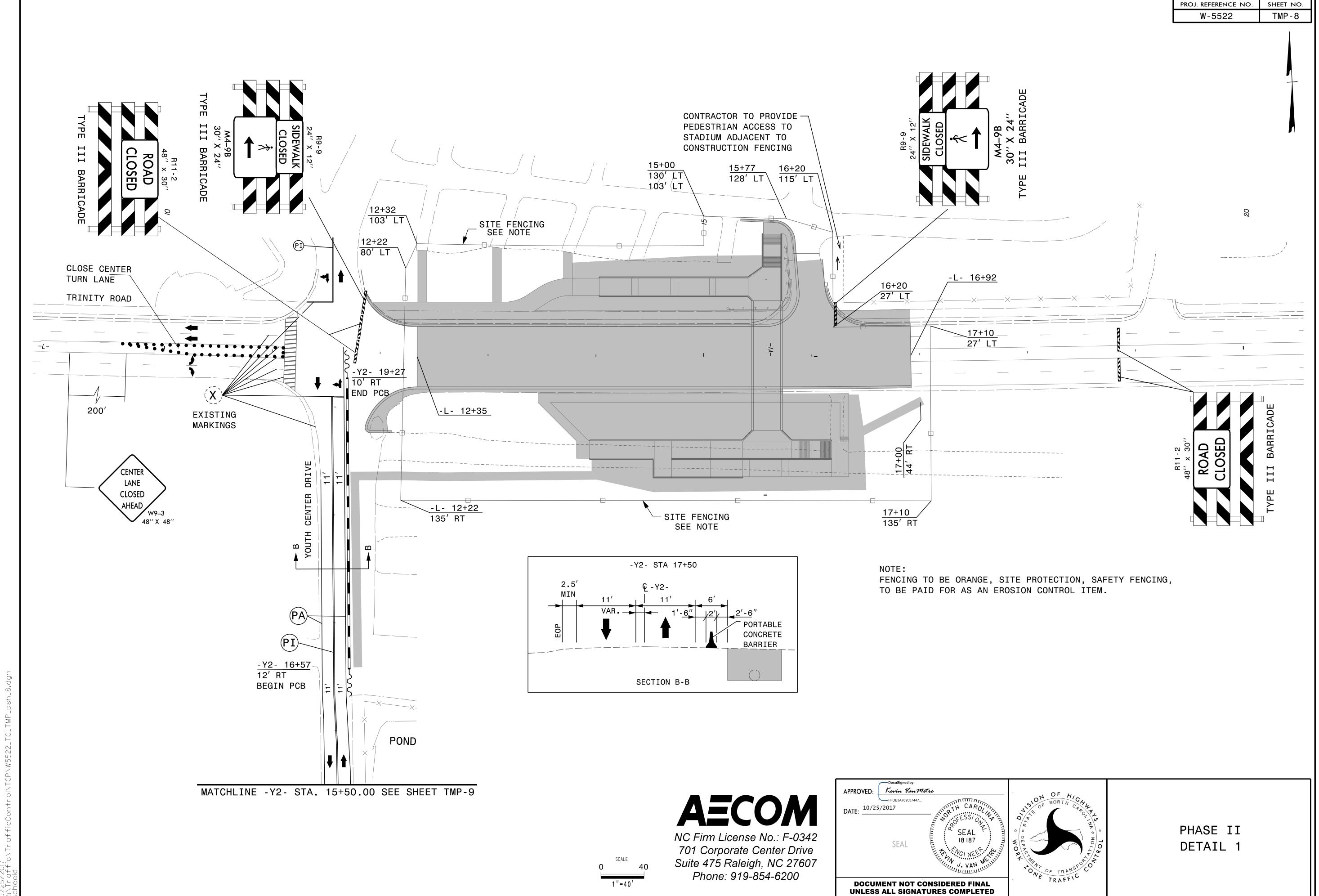
PROJ. REFERENCE NO. SHEET NO. W-5522 TMP-7



O 80 1 " = 80' NC Firm License No.: F-0342 701 Corporate Center Drive Suite 475 Raleigh, NC 27607 Phone: 919-854-6200

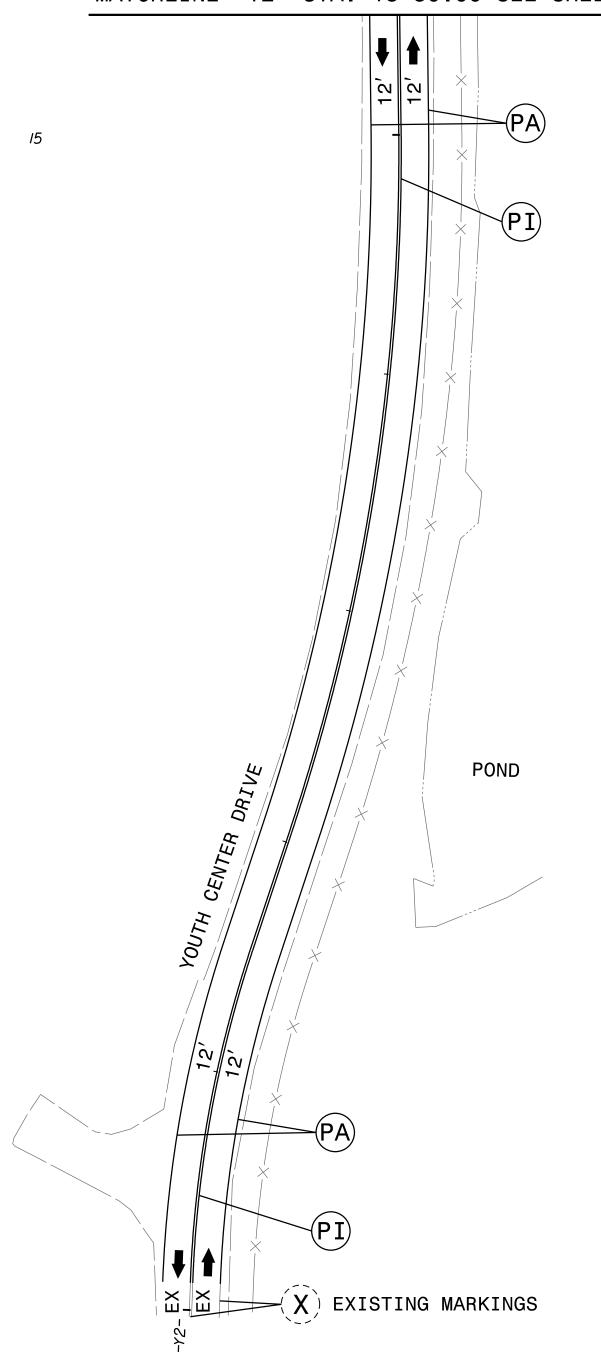


PHASE II OVERVIEW



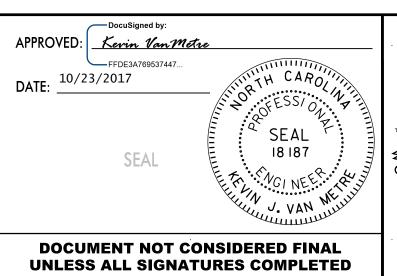
PROJ. REFERENCE NO.	SHEET NO.				
W-5522	TMP-9				

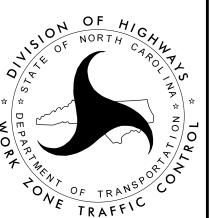
MATCHLINE -Y2- STA. 15+50.00 SEE SHEET TMP-8



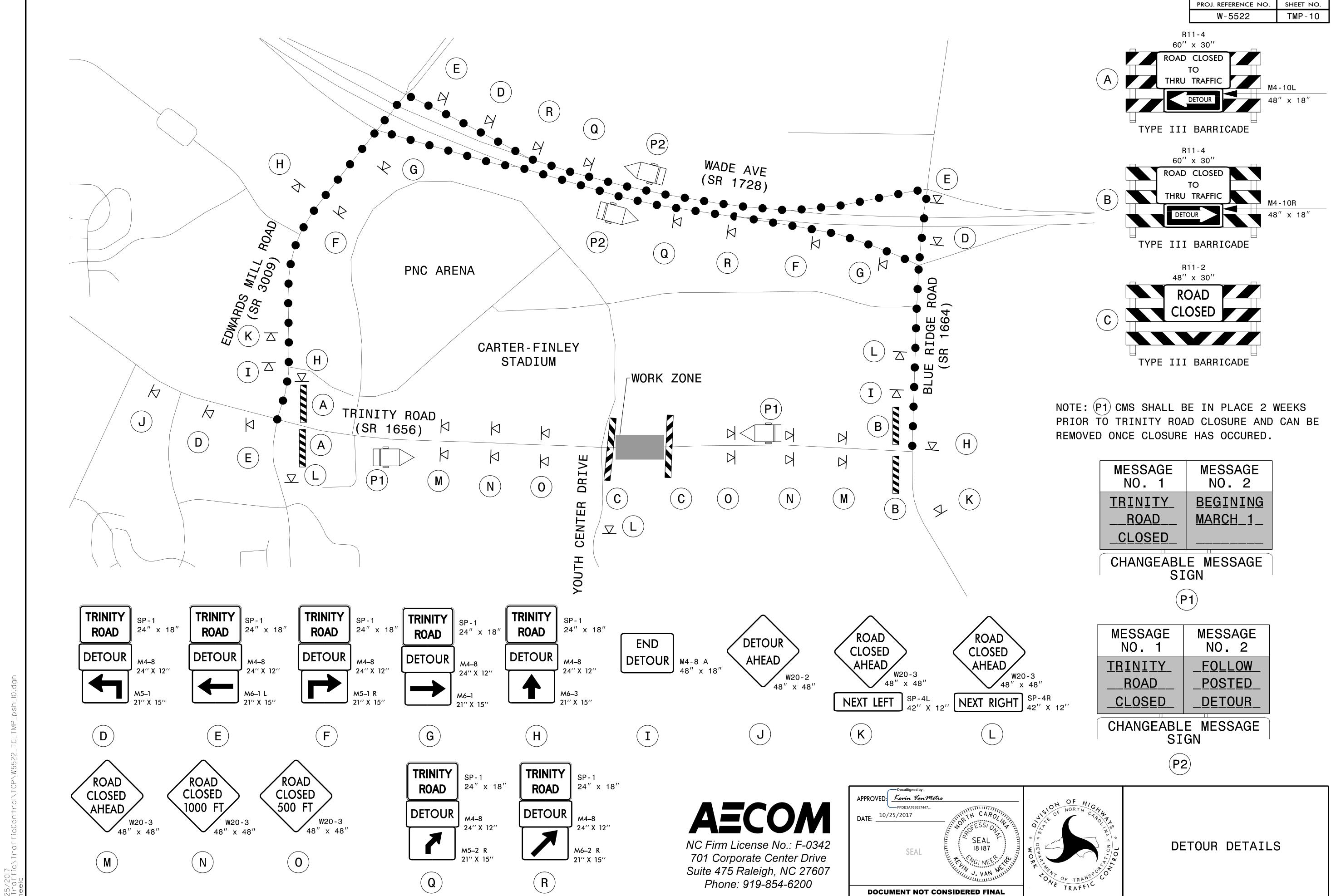
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PHASE II DETAIL 2



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